

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A color conversion definition coupling apparatus for creating a coupling color conversion definition defining an association of coordinates of a first device color space depending on a first device with coordinates of a second device color space depending on a second device in such a manner that coordinates of a device color space depending on a device mediating between an image and image data is associated with coordinates of a non-dependence color space independent of a device, and a first color conversion definition and a second color conversion definition, which define the first device and the second device, respectively, are coupled with one another, wherein each of the first color conversion definition and the second color conversion definition has a space conversion section defining an association between the coordinates of the device color space on a color reproduction area representative of colors capable of being reproduced by the device and the coordinates of the non-dependence color space, and an area conversion section defining on the non-dependence color space an association between coordinates of the color reproduction area and coordinates of a coupling area independent of the device, and wherein the conversion definition coupling apparatus comprises:

an area decision section that decides whether the two ~~the~~ coupling areas for the first color conversion definition and the second color conversion definition are identical; and

a definition coupling section that creates the coupling color conversion definition in such a manner that when the area decision section decides that the two ~~the~~ coupling areas are identical, associations defined by the space conversion section for the first color conversion definition, the area conversion section for the first color conversion definition, the area conversion section for the second color conversion definition, and the space conversion section for the second color conversion definition are sequentially coupled, and when the area decision section decides that the two ~~the~~ coupling areas are not identical, associations defined by the space conversion section for the first color conversion definition and the space conversion section for the second color conversion definition are coupled with one another in accordance with a conversion algorithm for converting coordinates from one to another of the two ~~the~~ color reproduction areas.

2. (currently amended): A color conversion definition coupling program storage medium storing a color conversion definition coupling program which causes a computer to operate as a color conversion definition coupling apparatus, when the color conversion definition coupling program is incorporated into the computer and is executed, the color conversion definition-coupling apparatus that creates a coupling color conversion definition defining an association of coordinates of a first device color space depending on a first device with coordinates of a second device color space depending on a second device in such a manner that coordinates of a device color space depending on a device mediating between an image and image data is associated with coordinates of a non-dependence color space independent of a device, and a first color conversion definition and a second color conversion definition, which define the first device and the second device, respectively, are coupled with one another, wherein

each of the first color conversion definition and the second color conversion definition has a space conversion section defining an association between the coordinates of the device color space on a color reproduction area representative of colors capable of being reproduced by the device and the coordinates of the non-dependence color space, and an area conversion section defining on the non-dependence color space an association between coordinates of the color reproduction area and coordinates of a coupling area independent of the device, and wherein the conversion definition coupling apparatus comprises:

an area decision section that decides whether the two ~~the~~-coupling areas for the first color conversion definition and the second color conversion definition are identical; and

a definition coupling section that creates the coupling color conversion definition in such a manner that when the area decision section decides that the two ~~the~~-coupling areas are identical, associations defined by the space conversion section for the first color conversion definition, the area conversion section for the first color conversion definition, the area conversion section for the second color conversion definition, and the space conversion section for the second color conversion definition are sequentially coupled, and when the area decision section decides that the two ~~the~~-coupling areas are not identical, associations defined by the space conversion section for the first color conversion definition and the space conversion section for the second color conversion definition are coupled with one another in accordance with a conversion algorithm for converting coordinates from one to another of the two ~~the~~-color reproduction areas.

3. (new): The color conversion definition coupling apparatus of claim 1, wherein the area decision section decides whether the two coupling areas for the first color conversion

definition and the second color conversion definition are identical by comparing makers of the first color conversion definition and the second color conversion definition, wherein if both a first maker of the first color conversion definition and a second maker of the second color conversion definition are identical, the area decision section decides that the two coupling areas are identical, and if the first maker and the second maker are not identical, the area decision section decides that the two coupling areas are not identical.

4. (new): The color conversion definition coupling apparatus of claim 1, wherein the area decision section decides whether the two coupling areas for the first color conversion definition and the second color conversion definition are identical by retrieving data of a coupling area side of a boundary conversion table of the two coupling areas to directly grasp the coupling areas, and comparing the two coupling areas based on the retrieved data.

5. (new): The color conversion definition coupling program storage medium of claim 2, wherein the area decision section decides whether the two coupling areas for the first color conversion definition and the second color conversion definition are identical by comparing makers of the first color conversion definition and the second color conversion definition, wherein if both a first maker of the first color conversion definition and a second maker of the second color conversion definition are identical, the area decision section decides that the two coupling areas are identical, and if the first maker and the second maker are not identical, the area decision section decides that the two coupling areas are not identical.

6. (new): The color conversion definition coupling program storage medium of claim 2, wherein the area decision section decides whether the two coupling areas for the first color conversion definition and the second color conversion definition are identical by retrieving data of a coupling area side of a boundary conversion table of the two coupling areas to directly grasp the coupling areas, and comparing the two coupling areas based on the retrieved data.

7. (new): A color conversion profile coupling apparatus comprising:
a first circuit that receives a first color conversion profile comprising a first space conversion section that associates coordinates of a first device color space capable of being reproduced by a first device with coordinates of a first non-dependence color space independent of the first device, and a first area conversion section that associates, on the first non-dependence color space, the coordinates of the first non-dependence color space with coordinates of a first coupling area independent of the first device, and a second color conversion profile comprising a second space conversion section that associates coordinates of a second device color space capable of being reproduced by a second device with coordinates of a second non-dependence color space independent of the second device, and a second area conversion section that associates, on the second non-dependence color space, the coordinates of the second non-dependence color space with coordinates of a second coupling area independent of the second device;

a second circuit that determines whether the first coupling area and the second coupling area are identical, and creates a coupling profile that associates the first color conversion profile and the second color conversion profile in a first configuration if the first coupling area and the second coupling area are identical, and creates the coupling profile in a second configuration

different from the first configuration if the first coupling area and the second coupling area are not identical.

8. (new): The color conversion profile coupling apparatus of claim 7, wherein the first configuration comprises a sequential coupling of the coordinates of the first device color space, the coordinates of the first non-dependence color space, the coordinates of the first coupling area, the coordinates of the second coupling area, the coordinates of the second non-dependence color space, and the coordinates of the second device color space, and the second configuration comprises a coupling of the coordinates of the first device color space, the coordinates of the first non-dependence color space, the coordinates of the second non-dependence color space, and the coordinates of the second device color space,

wherein in the second configuration, the coordinates of the first non-dependence color space and the coordinates of the second non-dependence color space are coupled in accordance with a conversion table that maps the coordinates of the first non-dependence color space and the coordinates of the second non-dependence color space.

9. (new): The color conversion profile coupling apparatus of claim 1, wherein the second circuit determines whether the first coupling area and the second coupling area are identical by comparing a first maker of the first color conversion profile and a second maker of the second color conversion profile, and if both the first maker and the second maker are identical, the second circuit determines that the first coupling area and the second coupling area are identical, and if the first maker and the second maker are not identical, the second circuit determines that the first coupling area and the second coupling area are not identical.

10. (new): A color conversion profile coupling program storage medium storing a color conversion profile coupling program which causes a computer to operate as a color conversion profile coupling apparatus, when the color conversion profile coupling program is incorporated into the computer and is executed, the color conversion profile coupling apparatus comprising:

a first module that receives a first color conversion profile comprising a first space conversion section that associates coordinates of a first device color space capable of being reproduced by a first device with coordinates of a first non-dependence color space independent of the first device, and a first area conversion section that associates, on the first non-dependence color space, the coordinates of the first non-dependence color space with coordinates of a first coupling area independent of the first device, and a second color conversion profile comprising a second space conversion section that associates coordinates of a second device color space capable of being reproduced by a second device with coordinates of a second non-dependence color space independent of the second device, and a second area conversion section that associates, on the second non-dependence color space, the coordinates of the second non-dependence color space with coordinates of a second coupling area independent of the second device;

a second module that determines whether the first coupling area and the second coupling area are identical, and creates a coupling profile that associates the first color conversion profile and the second color conversion profile in a first configuration if the first coupling area and the second coupling area are identical, and creates the coupling profile in a second configuration

different from the first configuration if the first coupling area and the second coupling area are not identical.

11. (new): The color conversion profile coupling program storage medium of claim 10, wherein the first configuration comprises a sequential coupling of the coordinates of the first device color space, the coordinates of the first non-dependence color space, the coordinates of the first coupling area, the coordinates of the second coupling area, the coordinates of the second non-dependence color space, and the coordinates of the second device color space, and the second configuration comprises a coupling of the coordinates of the first device color space, the coordinates of the first non-dependence color space, the coordinates of the second non-dependence color space, and the coordinates of the second device color space,

wherein in the second configuration, the coordinates of the first non-dependence color space and the coordinates of the second non-dependence color space are coupled in accordance with a conversion table that maps the coordinates of the first non-dependence color space and the coordinates of the second non-dependence color space.

12. (new): The color conversion profile coupling program storage medium of claim 10, wherein the second module determines whether the first coupling area and the second coupling area are identical by comparing a first maker of the first color conversion profile and a second maker of the second color conversion profile, and if both the first maker and the second maker are identical, the second module determines that the first coupling area and the second coupling area are identical, and if the first maker and the second maker are not identical, the

second module determines that the first coupling area and the second coupling area are not identical.